

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. The following listing provides the amended claims with deleted material crossed out and new material underlined to show the changes made.

### Claims 1-17 (Canceled)

18. (Previously Presented) A fuel for feeding spark ignition engines, in particular those fitted in aircraft, having an F4 octane number at least equal to 130 and a reduced level of aromatic compounds, said fuel containing greater than 40% by volume of a first hydrocarbons base (B1) essentially constituted by isoparaffins comprising 6 to 9 carbon atoms, wherein a level of isoparaffins containing eight carbon atoms in the isoparaffinic hydrocarbons cut (B1) is greater than 70% by mass, and a second hydrocarbons base (B2) also constituted by isoparaffins comprising 4 or 5 carbon atoms wherein the fuel contains at least 5.0% by volume of a hydrocarbons base (B3) essentially composed of cyclohexane, and in that the ratio R of the quantities by volume  $(B1+B2)/B3$  is greater than 2.0, wherein the level of aromatic compounds of the fuel is less than 10% by volume.

19. (Previously Presented) A fuel according to claim 18, wherein the ratio R of the quantities by volume  $(B1+B2)/B3$  is between 2.3 and 19.0.

20. (Previously Presented) A fuel according to claim 18, wherein the ratio K of the quantities by volume  $B1/B2$  is greater than 2.0.

21. (Previously Presented) A fuel according to claim 19, wherein the ratio K of the quantities by volume  $B1/B2$  is greater than 2.0.

22. (Previously Presented) A fuel according to claim 20, wherein the ratio K of the quantities by volume  $B1/B2$  is comprised between 2.3 and 10.6.

23. (Previously Presented) A fuel according to claim 21, wherein the ratio K of the quantities by volume B1/B2 is comprised between 2.3 and 10.6.

24-25. (Canceled)

26. (Previously Presented) A fuel according to claim 18, wherein the level of cyclohexanes in the cut (B3) is greater than 80% by mass.

27-28. (Canceled)

29. (Previously Presented) A fuel according to claim 18, wherein the level in the fuel of the isoparaffinic hydrocarbons cut (B1) is greater than 43% by volume.

30. (Canceled)

31. (Previously Presented) A fuel according to claim 18, wherein the isoparaffinic hydrocarbons containing eight carbon atoms are isooctane.

32. (Previously Presented) A fuel according to claim 29, wherein the isoparaffinic hydrocarbons containing eight carbon atoms are isooctane.

33. (Canceled)

34. (Previously Presented) A fuel according to claim 18, wherein the level of isooctanes in the isoparaffinic hydrocarbons cut (B1) with eight carbon atoms is greater than 75% by mass.

35. (Previously Presented) A fuel according to claim 18, wherein the second isoparaffinic hydrocarbons cut (B2) is essentially constituted by isoparaffins with five carbon atoms.

36. (Previously Presented) A fuel according to claim 19, wherein the second isoparaffinic hydrocarbons cut (B2) is essentially constituted by isoparaffins with five carbon atoms.

37. (Previously Presented) A fuel according to claim 20, wherein the second isoparaffinic hydrocarbons cut (B2) is essentially constituted by isoparaffins with five carbon atoms.

38. (Previously Presented) A fuel according to claim 35, wherein the isoparaffinic hydrocarbons containing five carbon atoms are isopentane.

39. (Previously Presented) A fuel according to claim 38, wherein the level of isopentane in the isoparaffinic hydrocarbons cut (B2) with five carbon atoms is greater than 85% by mass.

40. (Previously Presented) A fuel according to claim 39, wherein the level of isopentane in the isoparaffinic hydrocarbons cut (B2) with five carbon atoms is greater than 90% by mass.

41. (Previously Presented) A fuel according to claim 18, wherein the isoparaffinic hydrocarbons cut (B2) is essentially constituted by a mixture of n-butane and isobutane.

42. (Canceled)

43. (Currently Amended) A fuel according to claim 18, wherein [[its]] a benzene content of the fuel is less than 0.2% by volume.

44. (Currently Amended) A fuel according to claim 43, wherein [[its]] the benzene content of the fuel is less than 0.1% by volume.

45-46. (Canceled)

47. (Previously Presented) A method comprising providing the fuel according to claim 18, to run ignition engines on aircraft.

48. (Previously Presented) A method comprising providing the fuel according to claim 18, to run spark ignition engines of competition or similar vehicles.

49. (Previously Presented) A method comprising providing the fuel according to claim 18 to run a fuel treatment unit, such as a reformer, coupled to a fuel cell.

50. (Currently Amended) A fuel according to claim 18, wherein said fuel contains at least 10.0% by volume, of said hydrocarbons base (B3) essentially composed of cyclohexane cycloparaffins comprising 6 to 8 carbon atoms.

51. (Currently Amended) A fuel according to claim 18 ~~[[24]]~~, wherein the level of cyclohexanes in the ~~cycloparaffinic hydrocarbons cut~~ hydrocarbons base (B3) is greater than 90% by mass.

52. (Previously Presented) A fuel according to claim 18, wherein the fuel's level of aromatic compounds is less than 5%: by volume.

53. (Previously Presented) A fuel according to claim 18 further comprising other hydrocarbons and additives customary for this type of fuel.